

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for manufacturing a semiconductor device comprising:

forming a base layer comprising a photocatalyst material on an insulating surface of a substrate, wherein the photocatalyst material is selected from the group consisting of titanium oxide (TiO_x), strontium titanate (SrTiO_3), cadmium selenide (CdSe), potassium tantalate (KTaO_3), cadmium sulfide (CdS), zirconium oxide (ZrO_2), niobium oxide (Nb_2O_5), zinc oxide (ZnO), iron oxide (Fe_2O_3) and tungsten oxide (WO_3);

forming a first conductive film pattern by discharging a conductive material containing a photosensitive material on the base layer ~~over an insulating surface of a substrate~~ by droplet discharging;

selectively exposing the first conductive film pattern to laser light; and

forming a second conductive film pattern by developing the exposed first conductive film pattern.

2. (Currently Amended) A method for manufacturing a semiconductor device according to claim 1, wherein the conductive material containing [[a]] the photosensitive material comprises a material selected from the group consisting of Ag, Au, Cu, Ni, Al or Pt, and a compound thereof.

3. (Original) A method for manufacturing a semiconductor device according to claim 1, wherein the photosensitive material is a negative type photosensitive material.

4. (Original) A method for manufacturing a semiconductor device according to claim 1, wherein the photosensitive material is a positive type photosensitive material.

5. (Currently Amended) A method for manufacturing a semiconductor device comprising:

forming a base layer comprising a photocatalyst material on an insulating surface of a substrate, wherein the photocatalyst material is selected from the group consisting of titanium oxide (TiO_x), strontium titanate (SrTiO_3), cadmium selenide (CdSe), potassium tantalate (KTaO_3), cadmium sulfide (CdS), zirconium oxide (ZrO_2), niobium oxide (Nb_2O_5), zinc oxide (ZnO), iron oxide (Fe_2O_3) and tungsten oxide (WO_3);

forming a first conductive film pattern by discharging a conductive material containing a photosensitive material on the base layer ~~over an insulating surface of a substrate~~ by droplet discharging;

selectively exposing the first conductive film pattern to laser light;

forming a second conductive film pattern having a narrower width than that of the first conductive film pattern by developing the exposed first conductive film pattern;

forming a gate insulating film covering the second conductive film pattern; and

forming a semiconductor film over the gate insulating film.

6. (Currently Amended) A method for manufacturing a semiconductor device according to claim 5, wherein the conductive material containing ~~[[a]]~~ the photosensitive material comprises a material selected from the group consisting of Ag, Au, Cu, Ni, Al or Pt, and a compound thereof.

7. (Original) A method for manufacturing a semiconductor device according to claim 5, wherein the photosensitive material is a negative type photosensitive material.

8. (Original) A method for manufacturing a semiconductor device according to claim 5, wherein the photosensitive material is a positive type photosensitive material.

9. (Currently Amended) A method for manufacturing a semiconductor device comprising:

forming a base layer comprising a photocatalyst material on an insulating surface of a substrate, wherein the photocatalyst material is selected from the group consisting of titanium oxide (TiO_x), strontium titanate (SrTiO_3), cadmium selenide (CdSe), potassium tantalate (KTaO_3), cadmium sulfide (CdS), zirconium oxide (ZrO_2), niobium oxide (Nb_2O_5), zinc oxide (ZnO), iron oxide (Fe_2O_3) and tungsten oxide (WO_3);

forming a first conductive film pattern by discharging a conductive material containing a photosensitive material on the base layer by droplet discharging;

selectively exposing the first conductive film pattern to laser light;

forming a gate electrode by developing the exposed first conductive film pattern over an insulating surface of a substrate;

forming a gate insulating film covering the gate electrode;

forming a first semiconductor film over the gate insulating film;

forming a first second conductive film pattern by discharging a conductive material containing a positive type photosensitive material over the first semiconductor film;

exposing a selected portion of the ~~first~~ second conductive film pattern to laser light;

forming a source ~~electrode~~ wiring and a drain ~~electrode~~ wiring by developing the exposed ~~first~~ second conductive film pattern; and

etching the first semiconductor film using the source ~~electrode~~ wiring and the drain ~~electrode~~ wiring as masks.

10. (Original) A method for manufacturing a semiconductor device according to claim 9, further comprising a step of forming a second semiconductor film containing an impurity element imparting n-type or p-type conductivity over the first semiconductor film.

11. (Currently Amended) A method for manufacturing a semiconductor device according to claim 10, further comprising a step of etching the second semiconductor film using the source ~~electrode~~ wiring and the drain ~~electrode~~ wiring as ~~[[masks]]~~ masks.

12. (Original) A method for manufacturing a semiconductor device according to claim 9, wherein the conductive material containing the positive type photosensitive material is discharged by droplet discharging.

13. (Currently Amended) A method for manufacturing a semiconductor device comprising:

forming a base layer comprising a photocatalyst material on a first surface of a substrate, wherein the photocatalyst material is selected from the group consisting of titanium oxide (TiO_x), strontium titanate (SrTiO_3), cadmium selenide (CdSe), potassium tantalate (KTaO_3), cadmium sulfide (CdS), zirconium oxide (ZrO_2), niobium oxide (Nb_2O_5), zinc oxide (ZnO), iron oxide (Fe_2O_3) and tungsten oxide (WO_3);

forming a first conductive film pattern by discharging a conductive material containing a photosensitive material on the base layer by droplet discharging;

selectively exposing the first conductive film pattern to laser light;

forming a gate electrode by developing the exposed first conductive film pattern over a first surface of a substrate;

forming a gate insulating film covering the gate electrode;

forming a first semiconductor film over the gate insulating film;

forming a ~~first~~ second conductive film pattern by discharging a conductive material containing a negative type photosensitive material over the first semiconductor film;

exposing a portion of the ~~first~~ second conductive film pattern to laser light by emitting the laser light from a side of a second surface of the substrate using the gate electrode as a mask wherein the second surface is opposite to the first surface;

forming a source ~~electrode wiring~~ and a drain ~~electrode wiring~~ by developing the exposed ~~first~~ second conductive film pattern; and

etching the first semiconductor film using the source ~~electrode wiring~~ and the drain ~~electrode wiring~~ as masks.

14. (Original) A method for manufacturing a semiconductor device according to claim 13, wherein the substrate has an insulating surface.

15. (Original) A method for manufacturing a semiconductor device according to claim 13, further comprising a step of forming a second semiconductor film containing an impurity element imparting n-type or p-type conductivity over the first semiconductor film.

16. (Currently Amended) A method for manufacturing a semiconductor device according to claim 15, further comprising a step of etching the second semiconductor film using the source electrode wiring and the drain electrode wiring as [[masks]] masks.

17. (Currently Amended) A method for manufacturing a semiconductor device according to claim 13, wherein the conductive material containing the positive negative type photosensitive material is discharged by droplet discharging.

18. (Original) A method for manufacturing a semiconductor device according to claim 13, wherein the source electrode and the drain electrode are formed in a self-aligning manner to have a space therebetween that is the same as a width of the gate electrode.

19.- 25. (Canceled)

26. (New) A method for manufacturing a semiconductor device according to claim 1, wherein a transition metal is doped into the photocatalyst material.

27. (New) A method for manufacturing a semiconductor device according to claim 5, wherein a transition metal is doped into the photocatalyst material.

28. (New) A method for manufacturing a semiconductor device according to claim 9, wherein a transition metal is doped into the photocatalyst material.

29. (New) A method for manufacturing a semiconductor device according to claim 13, wherein a transition metal is doped into the photocatalyst material.